DOCUMENT RESUME

ED 274 888 CG 019 392

AUTHOR Richards, P. Scott; Davison, Mark L.
TITLE Using Multidimensional Scaling to Explore Value Issues in Counseling.
PUB DATE 26 Aug 86
NOTE 31p.; Paper presented at the Annual Convention of the American Psychological Association (94th, Washington, DC, August 22-26, 1986).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Beliefs; Church Workers; Client Characteristics (Human Services); Counselor Attitudes; *Counselor Client Relationship; *Counselors; *Multidimensional Scaling; *Religion; *Trust (Psychology); *Values

ABSTRACT

It is widely agreed that counselors' and clients' values influence every phase of psychotherapy. A preliminary appraisal of the usefulness of multidimensional scaling (MDS) for investigating the effects of values on counseling process and outcome was done. MDS was used to investigate how theistic or atheistic values of a counselor, when revealed, influenced 49 religious psychotherapy clients' and 51 religious leaders' trust of the counselor. Clients were members of The Church of Jesus Christ of Latter-day Saints (Mormons) in Minneapolis/St. Paul, Minnesota, receiving psychotherapy at a Mormon counseling clinic. The non-client subjects were not receiving counseling at the clinic and were serving in non-paid leadership positions in local congregations of the Mormon church. The analysis revealed that: (1) values of atheistic counselors inspired client distrust; (2) a counselor who believed in God inspired the most client trust while a counselor who didn't believe in God inspired the most distrust; (3) client trust was not one-dimensional, there appeared to be both orthodox and unorthodox trust dimensions; and (4) religious leaders were more orthodox in their trust, or more theistically oriented in their values, than were the clients. MDS might be used to investigate other current value issues in counseling. This preliminary appraisal of MDS suggests that it has potential as a methodological tool in this research area. (Author/NB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED274888

Using Multidimensional Scaling to Explore Value Issues in Counseling

P. Scott Richards and Mark L. Davison

University of Minnesota

129 Burton Hall

178 Pillsbury Drive S. E.

Minneapolis, Minnesota 55455

CG 019392

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

P. Scott Richards

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Paper presented at the annual convention of the American Psychological Association, Washington, D.C., August 26, 1986.

Abstract

A preliminary appraisal of the usefulness of multidimensional scaling (MDS) as a research tool for investigating the effects of values on counseling process and outcome was done. Using MDS, we investigated how theistic or atheistic values of a counselor, when revealed, influenced 49 religious psychotherapy clients' and 51 religious leaders' trust of the counselor. The analysis revealed that (1) the theistic counselor values inspired client trust and the atheistic values inspired client distrust, (2) a counselor who "believed in God" inspired the most client trust while a counselor who didn't believe in God, inspired the most distrust, (3) client trust was not one-dimensional; there appeared to be both "orthodox" and "unorthodox" trust dimensions, (4) religious leaders were more orthodox in their trust, or more theistically oriented in their values, than were the clients. We also briefly discussed and gave examples of how MDS might be used to investigate other current value issues in counseling. Our preliminary appraisal of MDS suggested that it has potential as a methodological tool in this research area.

Using Multidimensional Scaling to Explore Value Issues in Counseling

For many years in the counseling profession, the majority of counselors subscribed to the notion that a counselor's values could and should be kept out of the counseling relationship (Patterson, 1958). This view has changed, however, and it is now widely agreed that counselors' and clients' values influence every phase of psychotherapy (e.g., Bergin, 1980; 1985; Beutler, 1979; Graham, 1980; Rosenbaum, 1982). The effects of counselors' and clients' values on counseling process and outcome has, therefore, become a subject of research interest in recent years. Numerous issues need investigation in this research area (e.g., Bergin, 1985; Beutler, 1981) and a variety of methodologies will likely be needed to address them. We believe that one methodology which could prove useful for investigating value issues in counseling is multidimensional scaling (MDS).

MDS is a statistical technique developed in the behavioral and social sciences which can be used to map how people perceive phenomona in their environment. MDS has proved useful to researchers in many fields and in recent years it has been used with increasing frequency in the counseling psychology field. Numerous studies relevant to vocational counseling have been done using MDS and studies which have implications for individual, family, and group counseling have also been conducted (Davison,

Richards, & Rounds, in press). To our knowledge, however, MDS has not been used at all to address value issues in counseling.

The purpose of the present paper was to make a preliminary appraisal of the usefulness of MDS as a research tool for investigating the effects of values on counseling process and outcome. Specifically, we used MDS in an empirical study to investigate how theistic or atheistic values of a counselor, when revealed, influenced religious clients' and religious leaders' trust of the counselor. We also briefly discussed how MDS might be used to investigate other current value issues in counseling.

Method

Subjects

Subjects were members of The Church of Jesus Christ of Latter-day Saints (Mormons) in the Minneapolis/St. Paul, Minnesota area. The client sample was composed of 49 people who were receiving psychotherapy at a Mormon counseling clinic in Minneapolis. Thirty-six of the clients were females and 13 were males. The non-client sample was composed of 51 people who were not receiving therapy at the Mormon counseling clinic and who were serving in non-paid leadership positions in local congregations of the Mormon church. Thirty of the non-clients were females and 21 were males.

We were interested in investigating how counselors' values influence religious leaders' perceptions of the counselors' trustworthiness because in the Mormon church the leaders are often

responsible for referring church members for psychotherapy. The religious leaders' perceptions of counselors, therefore, would likely influence whether they would refer other church members for professional counseling. The clients' perceptions of counselors were of interest, of course, because their perceptions of counselors may directly influence therapy process and outcome.

Procedure

The data reported in this article were collected at the same time data were collected for a larger study (Richards, Smith, & Davis, 1986). A detailed description of the methods used to collect the data was included in the report of the other study so they will only be described briefly here.

The data were collected during fall, 1986. Sixty clients (the entire clientele) at the Mormon counseling clinic were given, by their therapist, a packet containing a Trust in Counselor Scale (described below), a number of other dependent measures (used in the larger study), and explanatory cover letters which explained the purpose of the study and asked them to participate. Forty-nine (82%) of the clients actually completed and returned the measures.

Using a church directory which contained the names of all members of the Mormon church in the Minneapolis/St. Paul area, 61 people serving in leadership positions were randomly selected from the entire population of people serving in such positions in the Minneapolis/St. Paul area. The 61 people who were selected were mailed packets containing the Trust in Counselor Scale, the other

dependent measures, and a cover letter which asked them to participate in the study. Fifty-one (84%) of the leaders actually completed and returned the dependent measures.

Measures

The Trust in Counselor Scale (TCS), shown in Table 1, is a 10-item inventory which asks subjects to rate on a 7-point Likert scale how much their trust for a counselor would be influenced if

---

Insert Table 1 about here

---

they found out the counselor had certain theistic or atheistic values. In an important exchange of opposing views about psychotherapy and religious values, Bergin (1980a, 1980b) and Ellis (1980) contrasted theistic and probabalistic atheistic value positions. The TCS was based on the value positions described by Bergin and Ellis and contains 5 theistic value statements and 5 alternative, atheistic value statements. The other measures administered to the subjects as part of the larger study were the Religious Orientation Scale (Allport & Ross, 1967), the Shame/Guilt Test A (Bupp, 1983), the Spiritual Well-Being Scale (Ellison, 1983), the Defining Issues Test (Rest, 1979), and the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960).

Data Analysis

To prepare the subjects' ratings of the value statements on the TCS for MDS data analysis, a subject's rating on each value

statement was subtracted from his or her rating on every other TCS value statement. The absolute values of these differences served as the proximity matrix for each subject with each number in the matrix representing how similar a pair of value statements were on the effect the statements had on the subject's trust of the hypothetical counselor. The smaller the number the more similar the two value statements were in the effect they had on the subject's perceptions of trust; the larger the number the less similar the value statements were perceived.

The data matrices derived from the TCS were analyzed using SINDSCAL (Pruzansky, 1975), an individual differences multidimensional scaling program. To determine if clients and leaders and males and females differed on the dimensions obtained from the MDS analyses, a two-way ANOVA was conducted on subject weights. To see if the MDS subject weights for the dimensions were related to any other psychological or religious variables, Pearson correlations were computed between the MDS dimensions and the other dependent variables administered to the subjects.

Results and Discussion

The MDS analysis yielded a two-dimensional solution. The two dimensions were highly correlated (.86); Dimension 1 (horizontal dimension) accounted for 61% of the total variance and Dimension 2 (vertical dimension) accounted for 14% of the total variance.

In Figure 1, the locations of the 10 value statements in this 2 dimensional space are diagrammed. Dimension 1 could be called

---

Insert Figure 1 about here

---

the "Theistic vs Atheistic Values" dimension. It can be seen that there is a large, distinct separation between theistic and atheistic values along Dimension 1. The theistic values described by Bergin all bunch closely together at the positive end of Dimension 1 while the atheistic values described by Ellis bunch closely together at the negative end of the dimension.

Dimension 2 could be called the "General Trust" dimension. The mean trust ratings for each statement, in parentheses, show that statements which have high average ratings fall at the positive (top) end, and those with low average ratings fall at the low (bottom) end. The fact that the value statements are spread out along Dimension 2 indicates that not all of the values described by Bergin and Ellis inspire the same levels of trust, on the average, for these Mormon subjects. For example, a counselor who believes in God or a Supreme Being inspires the most trust and a counselor who doesn't believe in God or a Supreme Being inspires the greatest distrust. The average amount of trust the other values inspire can also be seen.

An interesting, alternative interpretation of Dimensions 1 and 2 is possible. Dimension 1 chould be called the "Orthodox Trust" dimension and Dimension 2 the "Unorthodox Trust" dimension. In other words, perhaps these dimensions represent 2 different

prototypes for how these Mormon subjects perceived the values on the TCS. The Orthodox Trust dimension shows that for some people, all of Bergin's theistic values, or Ellis's atheistic values, are linked, and inspire the same amount of trust or distrust. Such people tend to trust counselors more if they hold any of Bergin's theistic values and less if they hold any of Ellis's atheistic values. The Unorthodox Trust dimension suggests that for some people, Bergin's theistic values, or Ellis's atheistic values, are not linked and do not inspire the same amount of trust or distrust. For such people, a counselor who believes in God inspires a large amount of trust, and a counselor who doesn't believe in God inspires a large amount of distrust. However, the trust such "unorthodox" people feel for a counselor is not influenced as much by a counselor's value postion on issues and beliefs concerning premarital and marital sexual fidelity, life after death, and universal versus relativistic ethics.

Insert Figure 2 and Table 2 about here

In Figure 2, the subjects' weights on the two dimensions are plotted. This figure gives us an idea of where individual subjects were located along the two dimensions. As can be seen in Table 2, leaders tended to have higher subjects weights on the Orthodox Trust or Theistic/Atheistic Values dimension and clients higher weights on the Unorthodox Trust or General Trust dimension. The

results of the ANOVA presented in Table 2 confirms that the religious leaders scored significantly higher on Dimension 1 than did clients. This indicates that the leaders were more orthodox in their trust, or theistically oriented in their values, than were the clients. The ANOVA failed to confirm that clients scored higher on Dimension 2 than leaders, although the difference approached statistical significance ($p = .154$). This indicates that although there was a tendency for clients to be more unorthodox in their trust, this difference may be a chance finding. Males and females did not differ on Dimension 1 or 2 and there were no significant interactions between therapy status (client/leader) and sex on these dimensions.

Insert Table 3 about here

In Table 3 it can be seen that the subjects' weights on Dimension 1 were significantly and positively correlated with intrinsic religiousness, spiritual, religious, and existential well-being, and Stage 4 moral reasoning (law and order orientation), and negatively with Stage 3 moral reasoning (good boy - nice girl orientation). Intrinsic religiousness, and spiritual, religious, and existential well-being appear to be measures of fairly orthodox and healthy religiousness; these measures have been found to correlate positively with various measures of religious commitment and psychological adjustment (Bergin, Masters, and

Richards, 1986; Donahue, 1985; Ellison, 1983; Richards, Smith, & Davis, 1986). In addition, individuals who are members of conventional, conservative religious groups tend to prefer Stage 4 moral reasoning (Getz, 1984). Thus, these correlational findings, as well as the finding that leaders scored higher than clients on this dimension, lend empirical support to our interpretation that Dimension 1 reflects an Orthodox Trust or Theistic vs Atheistic Values dimension. Dimension 2 was not significantly related with any of the available dependent measures. This finding does not disconfirm our interpretation that Dimension 2 is an Unorthodox Trust or General Trust dimension, however, it fails to lend empirical support to it. Further research examining the correlates of Dimension 2 with other variables is thus needed.

General Discussion

A couple of general conclusions about the effect of clients' and counselors' values on counseling process and outcome can be made based on the results of our study. First, the theistic values clearly caused the Mormon subjects to trust the hypothetical counselor more and the atheistic values caused the subjects to trust the counselor less. It appears, therefore, that in a real counseling situation these religious clients would be likely to trust counselors more who reveal they hold certain theistic values and beliefs and trust counselors less who reveal they hold certain atheistic values and beliefs. The religious leaders in this study, it appears, would be more likely to refer members of their

congregation to a counselor known to have theistic values. This is consistent with the findings of other researchers who have found that clients tend to perceive counselors who have values similar to their own as more attractive and credible (Atkinson & Schein, 1986). Our observation that Mormon clients at the Mormon Counseling Clinic frequently mention that they would prefer to work with a Mormon counselor because "they will understand where I'm coming from better" also suggests that our findings would generalize to a real counseling situation.

Second, the hypothetical counselor's values impacted clients' and leaders' trust in somewhat different ways, and for some of the subjects, at least, different types of theistic or atheistic values impacted trust in different amounts. Arizmendi et al (1985) have argued that researchers need to be more specific in their investigations of how values affect counseling process and outcome if progress is to be made in this research area. Our findings seem to support Arizmendi et al's (1985) position. It may be that client and counselor values strongly influence counseling process and outcome, but only for certain types of values and clients. We believe researchers need to take this possibility into account by avoiding the use of global value measures which confound different types of values, and by using research designs which allow them to examine if values impact therapy process and outcome more for some types of clients than others.

The advantages of using MDS rather than a more traditional

methodology to investigate the value issues of interest in this study were:

1. MDS showed that "trust in counselor" was not one-dimensional for these Mormon subjects. There appeared to be both "Orthodox" and "Unorthodox" trust dimensions. While these trust dimensions were highly correlated, they were not simply at opposite ends of the same dimension.

2. The pictorial representation yielded by MDS of perceived values and of the subjects' value orientation facilitated description of the findings, and we believe, made it easier to understand the results.

The major disadvantage of using MDS in this study was that our interpretations of the dimensions revealed by the MDS analysis were somewhat subjective, and we were unable to empirically support our interpretation of Dimension 2.

MDS and Other Value Issues

We believe MDS could prove useful for addressing other current counseling and value issues. In using MDS to explore value issues in counseling, researchers will first need to identify which values are of interest to study. For example, Bergin (1985) has described various types of values which he believes promote mental health. Rokeach's (1968) terminal/instrumental values measure represents another domain of values which might be studied using MDS.

After identifying the domain of values they are interested in, researchers will need to devise a method of obtaining the data to

be used in the MDS analysis. For example, a similarity rating task could be devised where each value of interest is paired with every other value of interest. Subjects could then be asked to rate how similar or disimilar each pair of values is. The data obtained from this rating task would be used to obtain proximity matrices, the basic input data for MDS. Davison (1983) describes a number of other ways of obtaining similarity/dissimilarity data.

The MDS analysis would then be done to reveal how the values were perceived by the subjects. The MDS analysis would potentially reveal (1) how many, and what dimensions underlie the subjects' perceptions of the values, (2) where specific values were located in the n-dimensional value space, and (3) what individual subject's weights were on the values dimensions. Depending on the research question of interest, the information obtained from this general methodology would be utilized in various ways. Several examples of how this might be done for specific value issues are given below.

1. In what way do clients' values change during the course of psychotherapy, and how do these changes correlate with therapy outcome (e.g., Beutler, 1981)? To investigate these issues one would simply need to repeat the general methodology described above at various stages of therapy (in the beginning and at the end of therapy, at least). One could then examine whether the (1) number or type of dimensions underlying the clients' value perceptions changed, (2) locations of specific values in the n-dimensional space changed, and (3) subjects' weights on the underlying

dimensions changed. One way of investigating if these changes were related to therapy outcome would be to correlate the therapy outcome measure(s) with the change in the subjects' weights on the underlying value dimensions.

2. What is the relationship between values orientation and mental health (e.g., Bergin, 1985)? One way to investigate this issue would be to select, based on MMPI profile diagnosis, psychologically healthy and unhealthy groups of subjects. The general MDS methodology described above would then be used to find out how the healthy and unhealthy groups of people perceived the values of interest. Similarities and differences in the MDS solutions for the two groups could be examined. The subjects' weights on the MDS value dimensions could also be correlated with the various MMPI scales.

3. What is the relationship between client-counselor pretreatment value similarity and therapy process and outcome (e.g., Beutler, 1981; Arizmendi et al., 1985). One way to investigate this issue would be to use the general MDS methodology above to determine how clients and counselors perceived various values at the start of therapy. A similarity index on the subject weights on the MDS dimensions could be obtained by subtracting the counselor and client weights on the MDS dimensions. A client-counselor similarity index for each specific value could also conceivably be derived. The similarity indices could then be correlated with various measures of therapy process and outcome

(e.g., counselor's attractiveness or trustworthiness, client's psychological improvement).

Conclusions

Our preliminary appraisal suggests MDS has potential for helping researchers explore value issues in counseling. Applying MDS successfully, of course, will require ingenuity and skill on the part of counseling researchers. Researchers interested in learning more about the theory behind MDS and how to apply it can can consult textbooks by Coxon (1982), Davison (1983), Kruskal and Wish (1978), and Schiffman, Reynolds and Young (1981). A simplified, introductory article about MDS by Davison, Richards, and Rounds (in press) is also available.

References

Allport, G.W., & Ross, J.M. (1967). Personal religious orientation and prejudice. Journal of Personality and Social Psychology, 5, 432-443.

Arizmendi, T.G., Beutler, L., Shanfield, S., Crago, M., & Hagaman, R. (1985). Client-therapist value similarity and psychotherapy outcome: A microscopic analysis. Psychotherapy, 22, 16-21.

Atkinson, D. R., & Schein, S. (1986). Similarity in counseling. Counseling Psychologist, 14, 319-354.

Bergin, A.E. (1980a). Psychotherapy and religious values. Journal of Consulting and Clinical Psychology, 48, 95-105.

Bergin, A.E. (1980b). Religious and humanistic values: A reply to Ellis and Walls. Journal of Consulting and Clinical Psychology, 48, 642-645.

Bergin, A.E. (1985). Proposed values for guiding and evaluating counseling and psychotherapy. Counseling and Values, 29, 99-116.

Bergin, A.E., Masters, K.S., & Richards, P.S. (1986). Religiousness and mental health reconsidered: A study of an intrinsically religious sample. Manuscript submitted for publication.

Beutler, L. (1979). Values, beliefs, religion and the persuasive influence of psychotherapy. Psychotherapy: Theory, Research, and Practice, 16, 432-440.

Beutler, L. (1981). Convergence in counseling and psychotherapy: A current look. Clinical Psychology Review, 1, 79-101.

Bupp, C.S. (1983). An examination of shame and guilt among veterans of the Vietnam conflict. Unpublished doctoral dissertation, University of Minnesota.

Coxon, A.P.M. (1982). The user's guide to multidimensional scaling. Exeter, NH: Heinemann Educational Books.

Crowne, D.P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. Journal of Consulting Psychology, 24, 349-354.

Davison, M.L. (1983). Multidimensional scaling. New York: Wiley.

Davison, M.L., Richards, P.S., Rounds, J.B. (in press). Multidimensional scaling in counseling research and practice. Journal of Counseling and Development.

Donahue, M.J. (1985). Intrinsic and extrinsic religiousness: Review and meta-analysis. Journal of Personality and Social Psychology, 48, 400-419.

Ellison, C.W. (1983). Spiritual well-being: Conceptualization and measurement. Journal of Psychology and Theology, 11, 330-340.

Getz, I.R. (1984). Moral judgement and religion: A review of the literature. Counseling and Values, 28, (94-116).

Graham, S.R. (Ed.). (1980). Values in psychotherapy [Special issue]. Psychotherapy: Theory, Research, and Practice, 17, (4).

Kruskal, J.B. & Wish, M. (1978). Multidimensional scaling. Beverly Hills, CA: Sage.

Patterson, C.H. (1958). The place of values in counseling and psychotherapy. Journal of Counseling Psychology, 5, 216-223.

Pruzansky, S. (1975). How to use SINDSCAL: A computer program for individual differences in multidimensional scaling. Unpublished manuscript, Bell Laboratories, Murray Hill, NJ.

Rest, J.R. (1979). Development in judging moral issues. Minneapolis: University of Minnesota Press.

Richards, P.S., Smith, S.A., Davis, L.D. (1986). Healthy and unhealthy forms of religiousness: A comparison of Mormon psychotherapy clients and Mormon non-clients. Paper presented at the annual convention of the American Psychological Association, Washington, D.C., August, 1986.

Rokeach, M. (1968). Beliefs, attitudes, and values. San Francisco: Jossey-Bass.

Rosenbaum, M. (1982). Ethics and values in psychotherapy: A guidebook. New York: The Free Press.

Schiffman, S.S., Reynolds, M.L., & Young, F.W. (1981). Introduction to multidimensional scaling. New York: Academic Press.

Table 1

Trust in Counselor Scale

Directions: Imagine that you have gone to see a professional counselor to seek help for some personal concerns you have. You have heard that your counselor is a competent and reputable psychologist, but this is practically all you know about him or her. During your first few sessions, you get fairly well acquainted and begin to trust and open up to your counselor. Your counselor also tells you more about him or her, and in doing so shares some of his or her beliefs and values with you. For each counselor belief or value below, write down the number which best describes how the trust you had felt for your counselor up to that point would be influenced by knowing your counselor believes this way. (1 = much less; 2 = less; 3 = slightly less; 4 = the same; 5 = slightly more; 6 = more; 7 = much more)

1. If my counselor told me they believe in God or a Supreme Being, I would trust him or her _____.

2. If my counselor told me they believe it's okay for people to have sex before they get married, even with someone they don't plan to marry or make any commitments to, I would trust him or her _____.

3. If my counselor told me they believe in strict morality and universal ethics, I would trust him or her _____.

(table continues)

Trust in Counselor Scale (continued)

4. If my counselor told me they believe that personal identity ceases to exist at death, I would trust him or her _____.

5. If my counselor told me they believe that married people shouldn't have sex with anyone except their spouse, I would trust him or her _____.

6. If my counselor told me they believe in flexible morality and situation ethics, I would trust him or her _____.

7. If my counselor told me they believe that people shouldn't have sex before they get married, I would trust him or her _____.

8. If my counselor told me they don't believe there is a God or a Supreme Being, I would trust him or her _____.

9. If my counselor told me they believe that personal identity continues to exist after death, I would trust him or her _____.

10. If my counselor told me they believe it's okay for married people to have sex with someone other than their spouse, I would trust him or her _____.

Table 2

Subject Weights on Dimension 1 and 2 and F-tests

	Clients			Leaders			F
	Male	Female	Total	Male	Female	Total	
Dimension 1	.474	.567	.542	.776	.805	.793	C:10.99***
							S: 0.56
Dimension 2	.156	.222	.204	.116	.074	.091	C: 2.07
							S: 0.04

*** $p < .001$

C: condition main effect comparison

S: sex main effect comparison

Table 3

Pearson Correlations of Subject Dimension Weights with Religious Orientation Scale (ROS), Shame/Guilt Test A (SGTA), Spiritual Well-Being Scale (SWBS), Defining Issues Test (DIT), and Marlowe-Crowne Social Desirability Scale.

Dependent Variable		Dimension 1	Dimension 2
ROS	Intrinsic	.36***	-.10
	Extrinsic	-.09	.04
SGTA	Shame	.03	-.08
	Guilt	.11	.07
SWBS	SWB	.32***	-.09
	RWB	.28**	-.04
	EWB	.29**	-.13
DIT	Stage 2	-.09	.06
	Stage 3	-.18*	.05
	Stage 4	.21*	-.03
	Stage 5A	-.16	.07
	Stage 5B	-.04	-.03
	Stage 6	.12	-.05
Principled Moral Reasoning		-.08	.02
Social Desirability		.14	-.08

* $p < .05$

** $p < .01$

*** $p < .001$

Figure Caption

Figure 1. Location of theistic and atheistic values in multidimensional space.

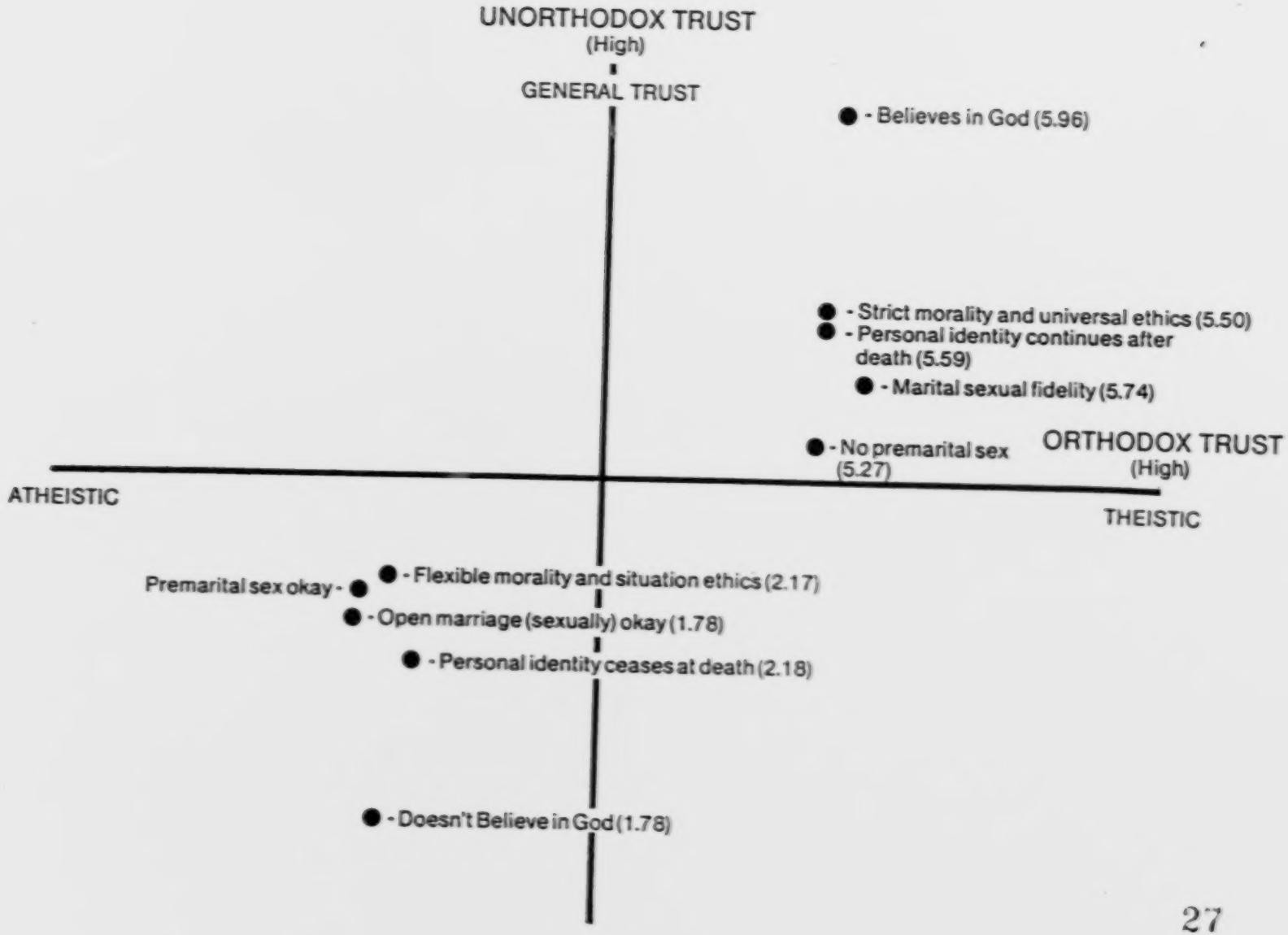
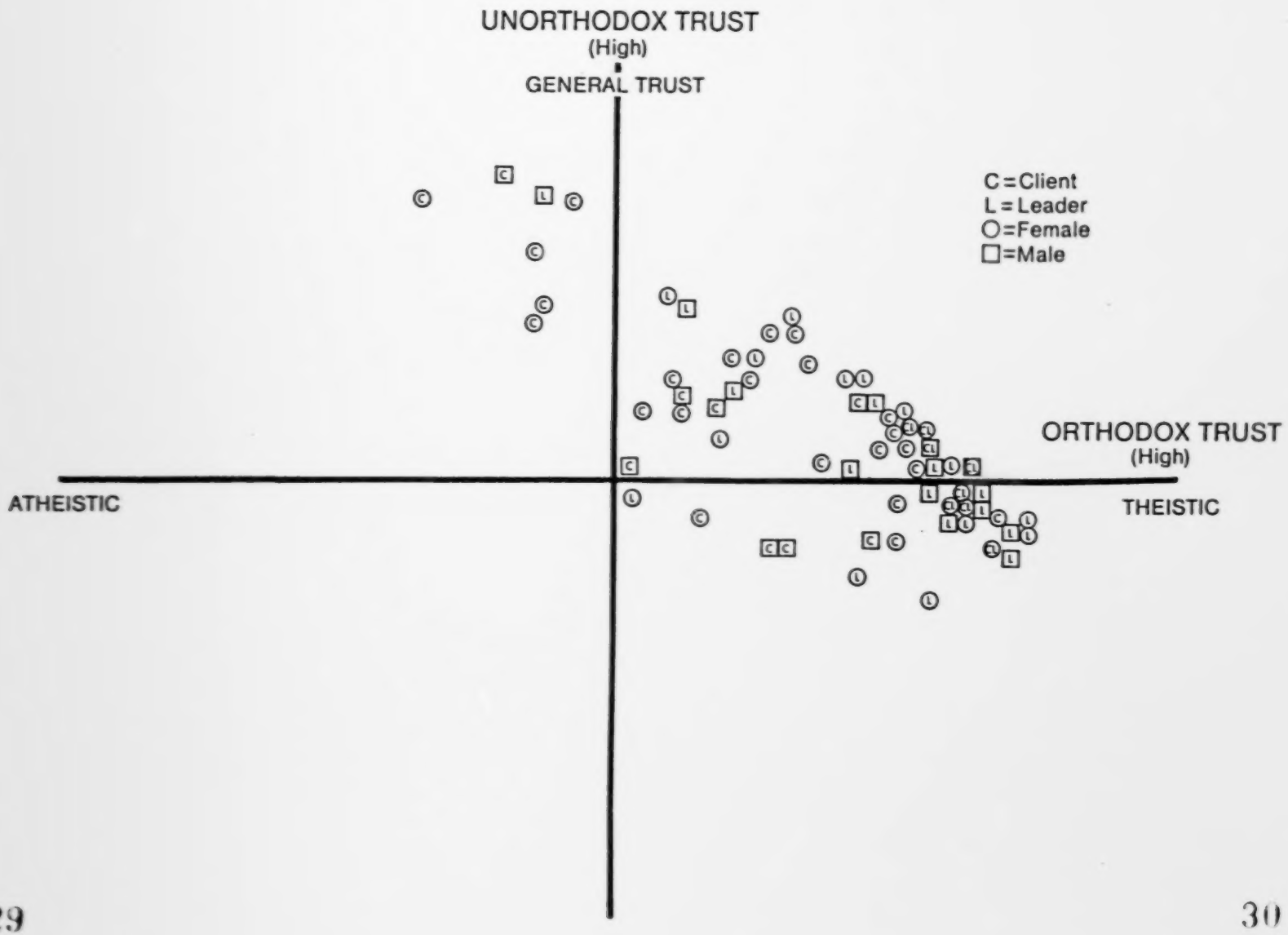

UNORTHODOX TRUST
(High)
GENERAL TRUST
- Believes in God (5.96)
- Strict morality and universal ethics (5.50)
- Personal identity continues after death (5.59)
- Marital sexual fidelity (5.74)
- No premarital sex (5.27)
ORTHODOX TRUST
(High)
ATHEISTIC
THEISTIC
Premarital sex okay -
- Flexible morality and situation ethics (2.17)
- Open marriage (sexually) okay (1.78)
- Personal identity ceases at death (2.18)
- Doesn't Believe in God (1.78)

Figure Caption

Figure 2. Location of subject weights in multidimensional space.


UNORTHODOX TRUST
(High)
GENERAL TRUST
C = Client
L = Leader
○ = Female
□ = Male
ORTHODOX TRUST
(High)
ATHEISTIC
THEISTIC

Author Notes

The first author is a PhD student in Counseling and Student Personnel Psychology in the Department of Educational Psychology at the University of Minnesota. The second author is a Professor of Psychological Measurement in the Department of Educational Psychology at the University of Minnesota. Requests for reprints should be addressed to P. Scott Richards, 129 Burton Hall, 178 Pillsbury Drive S. E., Minneapolis, Minnesota 55455.